UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,653	10/31/2005	Joel Queirel	0584-1031	6277

466 7590 06/08/2009

YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER
BERTHEAUD, PETER JOHN

ART UNIT	PAPER NUMBER
3746	

MAIL DATE	DELIVERY MODE
06/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/532,653	QUEIREL, JOEL	
	Examiner	Art Unit	
	PETER J. BERTHEAUD	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/26/2009 has been entered. It should be noted that claims 1, 3, 4, and 11 have been amended and claims 9-10 have been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 6, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pozivil 6,167,724 in view of Kobayashi 5,888,053.

Pozivil (Fig. 3) discloses a pump assembly comprising: a drive shaft 174 with, a first pump impeller 180 at a first axial end and driven by a first shaft output, the first impeller 180 operating at a low pressure and high flow rate, the first impeller having a first outlet (see 191) and a second outlet 188 to an exterior of the pump, a second pump impeller 192 at a second axial end and driven by a second shaft output, the second

impeller 192 operating at a higher pressure and lower flow rate as compared to the first impeller 180 (see col. 7, lines 12-29), the second impeller 192 having an inlet and a first outlet 198 to the exterior of the pump, wherein the first outlet (191) of the first impeller 180 is connected to the inlet of the second impeller 192 and delivers low pressure water to the inlet of the of the second impeller 192 so that the fluid flows from a region of low pressure toward a region of higher pressure, and wherein the second outlet 188 of the first impeller 180 and the first outlet 198 of the second impeller are separate outlets to the exterior of the pump (see configuration in Fig. 3); wherein the first outlet (191) of the first impeller 180 is close to the second outlet 188 of the first impeller; wherein the first outlet (191) of the first impeller 180 is located upstream of the second outlet 188. However, Pozivil does not teach the following claimed limitations taught by Kobayashi.

Kobayashi teaches a pump assembly comprising: an electric motor 6 having a drive shaft 7 with, axial ends, a first shaft output at a first of the axial ends (see bottom of Fig. 1), a second shaft output at a second of the axial ends (see top of Fig. 1), a first pump impeller 8B at the first axial end and driven by the first shaft output, the first impeller 8B having a first outlet (40), a second pump impeller 8C at the second axial end and driven by the second shaft output, the second impeller 8C having an inlet (see top of pump casing) and a first outlet 62 to the exterior of the pump, wherein the first outlet of the first impeller 8B is connected to the inlet of the second impeller 8C and delivers low pressure water to the inlet of the of the second impeller so that the water flows from a region of low pressure toward a region of higher pressure; wherein the water pumped by the second pump impeller 8C circulates around the motor 6 in order to

cool the motor; wherein the circulation of the fluid pumped by the second pump impeller 8C is carried out in a cylindrical space 40 formed around the motor 6, between the motor 6 and an external housing 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the pump assembly of Pozivil by arranging the electric motor between the first and second impellers and their outlet and inlet conduits, respectively, as taught by Kobayashi, in order to cool the motor by running the working fluid over the motor's outer casing.

4. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pozivil 6,167,724 in view of Kobayashi 5,888,053, and in further view of Cametti 2,887,062.

Pozivil in view of Kobayashi discloses the invention as discussed above. However, Pozivil in view of Kobayashi does not teach the following claimed limitations taught by Cametti.

Cametti teaches a motor pump unit comprising: a motor housing 1 wherein cooling fluid is carried in a coiled pipeline 56 which surrounds the motor 1. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the assembly of Pozivil in view of Kobayashi by implementing a coiled pipeline, as taught by Cametti, instead of an annular cavity, in order to cool the motor because these assemblies are obvious variants of one another.

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pozivil 6,167,724 in view of Kobayashi 5,888,053, and in further view of Gaeth 5,049,770.

Pozivil in view of Kobayashi discloses the invention as discussed above. However, Pozivil in view of Kobayashi does not teach the following claimed limitations taught by Gaeth.

Gaeth teaches a pump where the impeller body (impeller housing (14)) is releasable from the motor (electric motor assembly (22)), housing (mounting plate (12) and silencer housing (16)), and pump impellers (impeller (108)) (see column 7, lines 5-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to make the low pressure impeller housing of Pozivil in view of Kobayashi releasable from the motor, housing, and impellers, as taught by Gaeth, in order to allow the impeller to be easily replaced or serviced.

Response to Arguments

6. Applicant's arguments with respect to claims 1-8 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER J. BERTHEAUD whose telephone number is (571)272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit 3746

PJB
/Peter J Bertheaud/
Examiner, Art Unit 3746